

## Patterns of Pediatric Dental Emergencies at UMMC Children's Emergency Department

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### INTRODUCTION

Pediatric dental emergencies comprise a significant number of dental emergencies, especially in underserved communities. Dental trauma, caries, and persistent infection often lead to emergency room visits because of the lack of preventative care. Emergency departments play a huge part in treating acute dental issues; however, they are frequently not equipped to provide the proper care. This can lead to repeated dental visits, increased costs to the patient/family, and poor oral health outcomes in the future.

Studies in the past have showed a link between emergency dental visits and a variety of socioeconomic and demographic factors. These include age, race, gender, ethnicity, insurance status, and residential zip code. These elements may play a role in the lack of access to preventative dental treatment and appropriate intervention. Over time, this leads to an increasing need for emergency dental care that could otherwise be handled by outpatient preventative measures. It is imperative to understand these correlates so that emergency dental care settings can be properly equipped in the future and to also recognize high-risk populations so that targeted health interventions can be put into place.

### METHODS

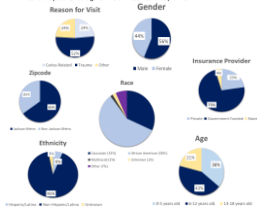
This retrospective study aimed to point out the most common causes of pediatric dental emergency visits that required a dental consultation or treatment in the UMMC Children's Emergency Department. These causes were then further evaluated to see how they vary across factors like age, race, ethnicity, gender, home zip code, and insurance status.

Data was obtained from electronic health records of pediatric patients who came to the Emergency Department for treatment between 07/01/2022 to 12/31/2024. The number of records was dependent on the number of records available in EPIC that had an Emergency Department note co-signed by attendings who were covering call from 07/01/2022 to 12/31/2024. Items of interest were the types of dental problems and how often they occurred and how they correlated with demographic and socioeconomic status.

### RESULTS

After data collection, the records show the following trends:

- Male children aged 6-12 years old included the majority (56% male, 43% 6-12 years old)
- Trauma was the leading cause of the ED visits (52%)
- Non-Hispanic/Latino comprised the ethnic majority with 91%
- African American was the leading race with 58%
- Most visits (51%) were from patients with a Jackson Metro Area zip code
- 73% of the patients had a government funded insurance provider



### DISCUSSION

The results of this study indicate a lack of access to preventative dental treatment. Furthermore, with dental trauma being the leading cause of Emergency Department visits, it indicates a lack of injury prevention resources specifically in the Jackson Metro Area. With the majority of the patients having a government funded insurance provider, it shows that most of the patients come from a low-income family.

With these findings, it is easier to identify high-risk populations to help educate them on routine preventative care and to also help them gain easier access to this care. These results could help to pinpoint specific needs with emergency dental materials, hopefully driving the betterment of the emergency dental setting and thus overall patient care.

This study provides a complete overview of pediatric dental emergency patterns, hopefully offering insight into potential disparities in the emergency dental setting. With this newfound insight, managing these factors could significantly lower the amount of pediatric emergency dental visits each year in the Jackson Metro Area and help promote better overall pediatric dental health.

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